CLAIMS:

1. Device for scanning a track on a record carrier, the device comprising a head for scanning the track,
a front-end unit coupled to the head for generating at least one scanning signal, and a detection unit for detecting anomalies in the scanning signal,
the detection unit being arranged for calculating a mean value of the scanning signal and comparing the mean value to a threshold for providing an anomaly detection signal.

2. Device as claimed in claim 1, wherein the detection unit is arranged for calculating said mean value for a predetermined interval, in particular by summing a predetermined number of samples of the scanning signal.

3. Device as claimed in claim 1, wherein the front-end unit comprises means for generating as the scanning signal a mirror signal indicative of the amount of radiation from a radiation beam reflected via the track, in particular by combining signals from a multitude of detector segments.

4. Device as claimed in claim 1, wherein the device comprises a servo unit for controlling the position of the head or scanning elements of the head in dependence of the scanning signal, and for adjusting said controlling in dependence of the anomaly detection signal, in particular for interrupting the scanning signal during an anomaly.

5. Device as claimed in claim 1, wherein the detection unit comprises classification means for generating a classification result of a detected anomaly by identifying the detected anomaly among a plurality of predetermined anomaly classes by comparing the scanning signal with a plurality of reference signals corresponding to said plurality of predetermined anomaly classes.

6. Device as claimed in claim 5, wherein the classification means are arranged for determining at least one characteristic value of the scanning signal during the anomaly

and comparing the at least one characteristic value to corresponding characteristic values of the plurality of predetermined anomaly classes.

7. Device as claimed in claim 5, wherein the classification means are arranged for calculating a distance in a multidimensional space, in particular calculating an Euclidean distance, for said comparing of characteristic values.

8. Device as claimed in claim 5, wherein the classification means are arranged for determining as characteristic values at least one of the following: a mean value, a duration, a peak value, a distribution of sample values of the scanning signal in a predetermined number of amplitude bands.

9. Device as claimed in claim 5, wherein the classification means are arranged for generating the classification result at a classification time substantially after the anomaly detection signal indicates an anomaly.

10. Device as claimed in claim 5, wherein the classification means are arranged for generating the classification result as soon as said comparison for one of the anomaly classes indicates a difference that is larger than the difference values for the remaining anomaly classes by at least a predefined threshold.

11. Device as claimed in claim 4, wherein the servo unit is arranged for adjusting said controlling also in dependence of the classification result, in particular for resuming the controlling in dependence of the scanning signal during an anomaly of a less disturbing type.

12. Method of scanning a track on a record carrier, the method comprising scanning the track, generating at least one scanning signal, calculating a mean value of the scanning signal, and comparing the mean value to a threshold for providing an anomaly detection signal.